Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Matthew DeSarro

HC 50 Box 4464 Luther, MT 59068

2. Type of action: Application for Beneficial Water Use No. 43D-30027648

3. Water source name: Unnamed Tributary to West Fork Red Lodge Creek

4. Location affected by project: SW¹/₄SW¹/₄SE¹/₄ Section 36, T6S, R18E, Carbon County

- 5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: This project is a 0.114 AF, flow through, fire suppression pond. The diversion works consists of an 8 inch CMP, the outlet is also and 8 inch CPM which is 5 feet lower in elevation creating gravity feed conditions for the flow through pond. Proposed pond is to satisfy a requirement of the Carbon County Board of Commissioners for subdivision approval. The source of water is an unnamed tributary of the West Fork Red Lodge Creek. The proposed pond has been determined to meet the exception to the Rock Creek (tributary of the Clarks Fork of the Yellowstone River) basin closure. The DNRC will issue a provisional water use permit if all criteria for issuance under MCA 85-2-311 are met.
- 6. Agencies consulted during preparation of the Environmental Assessment:

(include agencies with overlapping jurisdiction)

Montana Natural Heritage Program

Montana Historic Preservation Office

Montana Department of Fish Wildlife & Parks (MFWP)

Montana Department of Environmental Quality (MDEQ)

Carbon County Planning Office

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: This Unnamed Tributary to West Fork Red Lodge Creek is not on the MFWP list of chronically or periodically dewatered streams. The proposed project is a flow through pond. It has been estimated that the consumptive use of the plants and trees that will be removed for this project will exceed the evaporation of the proposed project. The net consumptive use of the pond is expected to be zero. The proposed project should not worsen the stream condition.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: This unnamed tributary to West Fork Red Lodge Creek is not on the MDEQ list of water quality impaired or threatened streams. The pond is proposed to be a 0.114 AF flow through pond. Water will be diverted into the pond via sliding head gate into an 8" PVC pipe located about 60 feet upstream of the confluence of the UT and West Fork Red Lodge Creek. Water will flow out of the pond through an 8" CMP, 20 feet in length and will discharge to a natural swale that returns to West Fork Red Lodge Creek. This proposed use for a fire suppression pond should have no significant impact on water quality issues in the area.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: The pond is proposed to be unlined with a 0.114 AF capacity. It is proposed to be 6 ft deep with a 0.019 Acre Surface Area, pit walls are lined with concrete retaining wall blocks that form a vertical wall. Some seepage is expected. There will be no pumping of groundwater. This proposed use of water should have no significant impact on groundwater quality or quantity in the area.

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: Boulders will be placed in the stream to create a cross vane of water which will be diverted into the pond via sliding head gate into an 8" PVC pipe located about 60 feet upstream of the confluence of the UT and West Fork Red Lodge Creek. There will be about 5 feet of drop in elevation from the diversion to the pond (over a distance of 60 feet). Water will flow out of the pond through an 8" CMP, 20 feet in length and will discharge into a natural swale that returns to West Fork Red Lodge Creek. The swale is covered in native grasses. The proposed diversion, its construction and operation should not have significant impacts on the channel, historic flows, barriers, riparian areas, dams or well construction.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

<u>Endangered and threatened species</u> - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: The Montana Natural Heritage Program has identified two endangered species or species of special concern and one ecological site report within this proposed project area. The species identified are the Yellowstone Cutthroat Trout and the Canada Lynx. The ecological site report is for the Beartooth Front-Aspen Parkland. The applicant would be expected to ensure that neither of these species or this site are harmed as a result of the construction and use of this proposed fire suppression pond.

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: The project area does not appear to have any existing wetlands. There is potential for creation or enhancement of wetlands at the pond site and at the discharge site. There should be no significant impacts to any existing wetlands.

<u>**Ponds**</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

This unnamed tributary is not known to support fish. The pond is proposed to be unlined with a 0.114 AF capacity. It is proposed to be 6 ft deep with a 0.019 Acre Surface Area, pit walls are lined with concrete retaining wall blocks that form a vertical wall. Water will be diverted into the pond via sliding head gate into an 8" PVC pipe located about 60 feet upstream of the confluence of the UT and West Fork Red Lodge Creek. There will be about 5 feet of drop in elevation from the diversion to the pond (over a distance of about 60 feet). Water will flow out of the pond through an 8" CMP, 20 feet in length and will discharge to a natural swale that returns to West Fork Red Lodge Creek

Determination: This proposed fire suppression pond should not have any significant impacts on existing wildlife, waterfowl or fisheries resources in the area.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: This proposed use should not degrade soil quality or cause saline seep problems in the area.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: There will be soil disturbance during construction of this proposed project and there will be a possibility of some noxious weeds spread and establishment. It is expected that

the landowner will control the spread of noxious weeds on his property as regulated by the Carbon County Weed District.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: There should be no deterioration of air quality or adverse effects on vegetation due to increased air pollutants from this proposed project.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: The Montana Historic Preservation Office has identified one previously recorded archeological or historic site of record in the proposed project area. This site is the historic Red Lodge Creek Road. Based on the lack of previous inventory and the ground disturbance required by this undertaking they feel that this project has the potential to impact cultural properties. A cultural resource inventory has been recommended for this site by the Montana Historical Society.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

HUMAN ENVIRONMENT

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: This proposed use is not inconsistent with any locally adopted environmental plans and goals for Carbon County.

<u>ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</u> - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: There should be no significant adverse impacts on recreational or wilderness activities from this proposed use.

<u>HUMAN HEALTH</u> - Assess whether the proposed project impacts on human health.

Determination: There should be no significant impact on human health from this proposed use.

<u>PRIVATE PROPERTY</u> - Assess whether there is any government regulatory impacts on private property rights.

Yes No_X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No significant impact.

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact
- (b) Local and state tax base and tax revenues? No significant impact
- (c) Existing land uses? No significant impact
- (d) Quantity and distribution of employment? No significant impact
- (e) Distribution and density of population and housing? No significant impact
- (f) Demands for government services? No significant impact
- (g) Industrial and commercial activity? No significant impact
- (h) Utilities? No significant impact
- (i) Transportation? No significant impact
- (j) <u>Safety</u>? No significant impact
- (k) Other appropriate social and economic circumstances? No significant impact

2. Secondary and cumulative impacts on the physical environment and human population:

<u>Secondary Impacts</u>: The use of this water for a fire suppression pond should not impact water users downstream of the area.

<u>Cumulative Impacts</u>: The fire suppression pond would provide valuable protection for homeowners in the Hope Subdivision.

- **3. Describe any mitigation/stipulation measures:** The applicant is aware that he would be required to cease using water if the use of the water is adversely impacting the rights of downstream users.
- 4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: The DeSarros would have to find another suitable site for their county mandated fire suppression pond project or install a cistern.

The "no action" alternative would mean that the DeSarros would have to find another suitable site or another water source for their project or their subdivision will not be approved by Carbon County.

PART III. Conclusion

- 1. **Preferred Alternative:** The preferred alternative would be to allow the use of the water from the unnamed tributary to West Fork Red Lodge Creek with the condition that the water rights of senior water users would not be adversely impacted.
- 2. Comments and Responses: None to report
- 3. Finding:
 Yes___ No_X__ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant environmental impacts were identified. No EIS is required.

Name of person(s) responsible for preparation of EA:

Name: Christine Smith

Title: Water Resources Specialist

Date: May 7, 2008